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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/391,360	09/07/1999	PAUL R. CARPENTIER	WRSH004	8493
24227	7590	11/28/2003		
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748			EXAMINER HA, LEYNNA A	
			ART UNIT 2131	PAPER NUMBER

DATE MAILED: 11/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/391,360

Applicant(s)

CARPENTIER ET AL.

Examiner

LEYNNA T. HA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 & 5. 6) ☐ Other:

DETAILED ACTION

1. Claims 1-30 have been examined.
2. Claims 3 and 7 are rejected under 35 U.S.C. 112, second paragraph.
3. Claims 1-5, 7-10, 13, 14, 18, and 20-30 are rejected under 35 U.S.C. 102(e).
4. Claims 6, 11, 12, 15-17, and 19 are rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. ***Claims 3 and 7 are recites the limitation "third file identifier and fourth file identifier" in generating for identifying and encrypting the descriptor file. There is insufficient antecedent basis for this limitation in the claim.***

The terms "third file identifier" and "fourth file identifier" are vague. The prior claims did not include a first and a second file identifier that pertains to the existence of the third and fourth file identifier.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-5, 7-10, 13,14, 18, and 20-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Saito (US 6,076,077).

As per claim 1:

Saito discloses a method of producing an encrypted version of a binary asset wherein the Examiner asserts for purposes of applying art, can be a file or data content (col.7, line 10-28). The method comprising a unique identifier (UID) that was generated for the file that was computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55). The

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Examiner also asserts that the unique identifier can be a key such as a secret or common key or a public key type wherein the key is used to identify the file. The file is encrypted with a key, which results in encrypted file (col.7, line 60-col.8, lines 67). Further, Saito teaches providing the key to decrypt the encrypted file to verify the integrity of the decrypted file (col.9, lines 19-40). Also refer to col.10, line 5, ET. Seq.

As per claim 2:

Saito discloses a second UID for the encrypted version of the file wherein is used to retrieve the encrypted file (col.11, line 4-col.12, line 47).

As per claim 3:

Saito discloses a descriptor file that includes the UID and the second UID wherein generates a third file ID that is used to encrypt the descriptor file (col.13, line 45-col.14, line 35). Saito also includes a fourth file ID for the encrypted descriptor file wherein the third and the fourth ID are used to access the contents of the (original) file (col.16, line 1, et. Seq.).

As per claim 4:

Saito discloses a method of producing an encrypted version of a file or data content (col.7, line 10-28). The method comprising a file identifier (F-ID) that was generated for the file that was computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55). The Examiner also asserts that the file identifier can be a key such as a secret or common key or a public key type wherein the key is used to identify the file. The file is

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encrypted with a key, which results in encrypted file (col.7, line 60-col.8, lines 67). Further, Saito teaches providing the key to decrypt the encrypted file to verify the integrity of the decrypted file (col.9, lines 19-40). Also refer to col.10, line 5, ET. Seq.

Saito discloses a second F-ID for the encrypted version of the file wherein is used to retrieve (by decrypting) the encrypted file (col.11, line 4-col.12, line 47).

As per claim 5:

Saito uses a hash function (col.12, lines 55-57).

As per claim 7: As rejected with the same rationale in claim 2.

As per claim 8:

Saito discloses a method of producing an encrypted version of a binary asset wherein the Examiner asserts for purposes of applying art, can be a file or data content (col.7, line 10-28). The method comprising a unique identifier (UID) that was generated for the file that was computed from at least a portion of the contents where the Examiner asserts that uniquely identifies the file as intrinsic (col.7, lines 38-55). The Examiner also asserts that the unique identifier can be a key such as a secret or common key or a public key type wherein the key is used to identify the file. The file is encrypted with a key, which results in encrypted file (col.7, line 60-col.8, line 18). Further, Saito teaches providing the key to decrypt the encrypted file to verify the integrity of

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the decrypted file (col.9, lines 19-40). Also refer to col.8, lines 20-59 and col.10, line 5, ET. Seq.

As per claim 9: Saito includes the method comprising a unique identifier (UID) that was generated for the file that was computed from at least a portion of the contents where the Examiner asserts that uniquely identifies the file as intrinsic (col.7, lines 38-55)..

As per claim 10: As rejected with the same rationale as rejected in claim 5.

As per claim 12: As rejected with the same rationale as rejected in claim 5.

As per claim 13:

Saito discloses a structure for reliably identifying plurality of files comprising file names and Meta data for each file (col.10, lines 57-65). In addition, Saito discloses a unique identifier (UID) that was generated for the file that was computed from at least a portion of the contents where the Examiner asserts that uniquely identifies the file as intrinsic (col.7, lines 38-55). The Examiner also asserts that the unique identifier can be a key such as a secret or common key or a public key type wherein the key is used to identify the file. The file is encrypted with a key, which results in encrypted file (col.7, line 60- col.8, line 18). Further, Saito teaches providing the key to decrypt the encrypted file to verify the integrity of the decrypted file (col.9, lines 19-40). Also refer to col.8, lines 20-59 and col.10, line 5, ET. Seq.

As per claim 14: As rejected with the same rationale as rejected in claim 13.

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As per claim 18: As rejected with the same rationale as rejected in claim 13.

Also, see col.14, lines 56-67.

As per claim 20: As rejected with the same rationale as rejected in claim 16.

As per claim 21: As rejected with the same rationale as rejected in claim 1.

As per claim 22:

Saito discloses a structure for reliably identifying plurality of files comprising file names and Meta data for each file (col.10, lines 57-65).

As per claim 23: Saito discloses a method of producing an encrypted version of a file (col.7, line 10-28). Saito teaches encrypting and decrypting wherein the method comprises a file identifier (F-ID) that was generated for the file that was computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55) and encrypts and decrypts the file with the F-ID as the key. However, Saito fails to include decompressing a file in conjunction with decrypting.

As per claim 24:

Saito includes the digital signature and the key is used to authenticate the non-encrypted file (col.14, lines 1, Et Seq.).

As per claim 25: As rejected with the same rationale as rejected in claim 24.

As per claim 26:

Saito discloses a method of producing an encrypted version of a file (col.7, line 10-28). Saito teaches encrypting and decrypting wherein the method comprises a file identifier (F-ID) that was generated for the file that was

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computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55) and encrypts and decrypts the file with the F-ID as the key.

Saito discloses a descriptor file that includes the UID and the second UID wherein generates a third file ID that is used to encrypt the descriptor file (col.13, line 45-col.14, line 35). Saito also includes a fourth file ID for the encrypted descriptor file wherein the third and the fourth ID are used to access the contents of the (original) file (col.16, line 1, et. Seq.).

Further, Saito discloses a structure for reliably identifying plurality of files comprising file names and Meta data for each file (col.10, lines 57-65). Also, refer to col.13, Et Seq.

As per claim 27: As rejected with the same rationale as rejected in claim 22.

As per claim 28: As rejected with the same rationale as rejected in claim 23.

As per claim 29: As rejected with the same rationale as rejected in claim 24.

As per claim 30: As rejected with the same rationale as rejected in claim 25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 11, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito as applied to claims 4, 8, and 18 above, and further in view of Berkowitz, et al. (US 5,832,479).

As per claim 6:

Saito discloses a method of producing an encrypted version of a file or data content (col.7, line 10-28). The method comprising a file identifier (F-ID) that was generated for the file that was computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55). However, Saito fails to include compressing a file.

Berkowitz, et al. discloses a method for storing data wherein each document has a unique document identifier and data keys (col.1, lines 52-65). Berkowitz includes a step of providing data key identifier and further compressing the file (col.4, lines 28-52). The Examiner asserts compressing the file helps reduce the size of the data therein so that less space is needed and less bandwidth is needed to transmit the file. Therefore, it would have been obvious to modify the encrypting of the file of Saito, in conjunction with

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the step of compressing the file of, Berkowitz, because the data size is reduced or minimized to express transmission of the file (col.4, lines 59-65).

As per claim 11: As rejected with the same rationale as rejected in claim 6.

As per claim 19:

Saito discloses a method of producing an encrypted version of a file (col.7, line 10-28). Saito teaches encrypting and decrypting wherein the method comprises a file identifier (F-ID) that was generated for the file that was computed from at least a portion of the contents and that uniquely identifies the file (col.7, lines 38-55) and encrypts and decrypts the file with the F-ID as the key. However, Saito fails to include decompressing a file in conjunction with decrypting.

Berkowitz, et al. discloses a method for storing data wherein each document has a unique document identifier and data keys (col.1, lines 52-65). Berkowitz includes a step of providing data key identifier and further compressing the file but fails to explicitly include the step of decompressing the encrypted version of the file in conjunction with decrypting (col.4, lines 28-52). The Examiner asserts that Berkowitz teaches compressing the file in order to reduce the size and the bandwidth when transmitting but cannot view in its compressed state. Thus, it is inherent to decompress when decrypting the file in order to restore the contents to its original form. It would have been obvious for a person of ordinary skill in the art to decompress the file because it

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restores the contents of the compressed file to its original form in order to view the file (col.4, lines 59-65).

8. Claims 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito, and further in view of "Microsoft Computer Dictionary, 5th Edition".

As per claim 12:

Saito discloses a method of producing an encrypted version of a file or (col.7, line 10-28) wherein a unique identifier (UID) is generated for the file that was computed from at least a portion of the contents where the Examiner asserts that uniquely identifies the file as intrinsic (col.7, lines 38-55). However, Saito fails to include a flattened file.

According to the "Microsoft Computer Dictionary, 5th Edition", to "flatten" is to combine all layers of text or images into a single layer (pg.217). It would have been obvious for a person of ordinary skill in the art to include or create a flattened file because it significantly reduces its file sized and can be saved in a wider range of formats.

As per claim 15:

Saito discloses a method of producing an encrypted version of a file or (col.7, line 10-28) wherein a unique identifier (UID) is generated for the file that was computed from at least a portion of the contents where the Examiner asserts that uniquely identifies the file as intrinsic (col.7, lines 38-55). Saito

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includes a key control center for storing crypt keys that are used for decryption (col.10, lines 30-39). The Examiner also asserts that the unique identifier can be a key such as a secret or common key or a public key type wherein the key is used to identify the file. The file is encrypted with a key, which results in encrypted file (col.7, line 60-col.8, line 18). Further, Saito teaches providing the key to decrypt the encrypted file to verify the integrity of the decrypted file (col.9, lines 19-40). Also refer to col.8, lines 20-59 and col.10, line 5, ET. Seq. However, Saito fails to explicitly teach a flattened file.

According to the "Microsoft Computer Dictionary, 5th Edition", to "flatten" is to combine all layers of text or images into a single layer (pg.217). It would have been obvious for a person of ordinary skill in the art to include or create a flattened file because it significantly reduces its file sized and can be saved in a wider range of formats.

As per claim 16: As rejected with the same rationale as rejected in claim 15.

As per claim 17:

Saito discloses a method a structure for reliably identifying plurality of files comprising file names and Meta data for each file (col.10, lines 57-65).

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Claim Objections

8. Claim 5 objected to because of the following informalities:

The Examiner finds the phrase "generating use a hash" unclear. The Examiner suggests the following: "generating by using a hash" or "generating the use of a hash" or what the Applicant finds more proper for this phrase.

Appropriate correction is required.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (703) 305-3853. The examiner can normally be reached on Monday - Friday (7:00 - 3:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ SHEIKH can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5631.

LHA


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100